

## **ACL reconstruction frequently asked questions**

Q: What is ACL reconstruction?

A: Anterior cruciate ligament reconstruction, also known as ACL reconstruction, is surgery which is used to reconstruct the anterior cruciate ligament (ACL). The ACL is a key ligament in the knee, connecting the back of the femur bone to the front of the tibia bone.

Q: What causes the need for an ACL reconstruction?

A: ACL reconstruction is typically required to address a torn and non-functional ACL. An ACL reconstruction can prevent the worsening of knee cartilage condition in the long term which can occur if the knee keeps giving way due to the torn ACL not controlling the stability of the knee. Normal activities can be resumed without an ACL reconstruction such as walking, jogging, and biking. Non operative treatment would require hamstring strengthening to reduce instability.

Many ACL reconstructions are needed by sports players who play sports involving jumping and sudden changes of direction. – such as basketballers, skiers or footballers, rugby players and netballers. The and many other sports need the ACL to be working properly to stabilize the knee and stop it from collapsing during the game.

Q: Which symptoms might I expect prior to needing an ACL reconstruction?

A: The symptoms which might indicate an injury that could require an ACL reconstruction include: The inability to continue a certain activity due to the knee collapsing or giving way; a popping feeling in the knee region can sometimes be described; pronounced swelling usually occurs immediately after the ACL is injured but can also occur when the knee subsequently gives way; instability.

Q: What does an ACL reconstruction involve?

A: The procedure uses grafts to replace the ligament, which is made from another part of the patient's body such as part of the patellar tendon from the kneecap. This is known as an autograft. After it is passed from the tibia to the femur, the graft is held in place using posts or screws.

Q: How long does recovery take following an ACL reconstruction?

A: After the operation, you will stay in a recovery room for a short while after the procedure, while the anesthetic wears off. Patient returns home the same day, allowing full weight bearing on operative leg with crutches and in a brace locked in extension. You will be evaluated in our office 1 week from surgery where you will be given a physical therapy prescription where you will start your rehabilitation.

If your job involves heavy lifting or long periods of standing, it might be a few months before you can resume your usual duties. If your job is office based, you may be back to work within 3-6 weeks. Typically, intensive sporting activities can only be resumed dependent on the rehabilitation progress. The average time to return to full sports can be between 6-9 months depending on how much time you dedicate to your rehab. However, you will hopefully be back to gym based exercise by about two months from the operation, if all is progressing well.

Q: What are the different options for ACL graft? And how are they chosen?

A: Two ligaments reconstruction options exist today which include ligament from a cadaver (called allograft) or using ligaments from the patient's own tissue (called autograft). Allografts (or ligaments from cadavers) tend to heal faster since the patient does not have a ligament taken from their own body. Although healing time is faster, autografts (or ligaments taken from patient) have higher success rates than allografts (ligaments from cadaver). Each patient situation is different and the surgeon carefully considers the patients expectations and future outlook for activity when evaluating the best option.

Athletes are encouraged heavily to use their own tissue (allograft). Two options for allograft exist: Hamstring tendon or bone tendon bone. The Bone tendon bone technique comes from the patella tendon and is a common practice for young athletes. The Hamstring tendon technique consists of two ligaments (gracilis and semitendinosus) taken from the patient's own body. Many surgeons have a preferred type of graft for different reasons. The strength of patellar tendon and hamstring grafts are essentially equal. There is no right answer as to which is best, at least not one that has been proven in scientific studies.

Q: Who is at high risk for ACL tear?

A: Females are three times as likely as males. Many factors play into this such as the mechanics of how females land from a jump as well as the angle of their legs. A multitude of sports are higher risk such as football, soccer, and basketball that require a lot of cutting movements.